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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,509	06/04/2001	Kazuo Maeda	VREX-0020USAONOO	4689

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EXAMINER	
CHANG, AUDREY Y	
ART UNIT	**PAPER NUMBER**
2872	

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/873,509	Applicant(s) MAEDA ET AL.	
	Examiner Audrey Y. Chang	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sh t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 June 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan and Republic of Korea on June 15, 1999, March 6, 2001 and January 13, 2001. It is noted, however, that applicant ***has not filed a certified copy*** of the abovementioned application as required by 35 U.S.C. 119(b).

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

The Decalration is not in permanent ink, or its equivalent in quality, as required under 37 CFR 1.52(a).

3. Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on applications filed in Japan and Republic of Korea on recited. Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed ***individual steps*** of the method for manufacturing a 3D image body as recited in claims 1-7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling.** The relationship between the *left eye and right eye image display parts* with the phase-difference film *pattern* is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). A stereoscopic image illusion can only be achieved if the right eye and left eye image display parts *only* be received by the right eye and left eye solely and respectively. The specification also fails to identify what is considered here as "***phase difference***". In general, the polarization coding and color coding are the most well known means in the art to code the image light so that the left and right eye image display parts are recited by the appropriate eyes. ***The applicant needs to identify the means concerning the "phase-difference" to make the specification enable.***

7. **Claims 3, 4, 5 and 7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**

The specification and the claims fail to teach what is considered here as "the ***appropriate members***" for filling the spaces in the resist members. One skilled in the art will not be able to interpret the meanings of "***appropriate***".

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*The claims are generally **narrative and indefinite**, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.*

The term "phase-difference" recited in claims is indefinite and confusing since it is not clear what is considered here as phase difference.

The claims are also ***incomplete*** since they fail to give the structural relationships between the right eye image display parts and left eye image display parts with the rest of the elements of the claims to make the claims operable.

The notation ";:" in claim 2 is confusing and indefinite.

The phrase "the appropriate members" recited in claim 4 is indefinite since it lacks proper antecedent basis.

Regarding claim 6, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 6 is confusing and indefinite since it is not clear how could **both** the right-eye image display parts and the left-eye image display parts and the transparent resist members both **be disposed** on the drawn PVA film, it is also not clear what is the structural relationships between the image display parts and the resist members.

The phrase "the spaces" recited in claim 7 is indefinite since it lacks proper antecedent basis from its based claim.

The claims as stand now contain numerous errors, confusions and indefiniteness. The examiner can only point our a few. It is ***applicant's responsibility*** to clear out **ALL** of the discrepancies to make the claims in comply with the requirements of 35 USC 112, first and second paragraphs.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Faris (PN. 6,359,664) in view of the patent issued to Okamoto (PN. 6,147,738).

Faris teaches a display system for visually displaying a *polarized spatially multiplexed image* (SMI) (48 of Figure 15C) of a *3D object, having left eye image parts and right eye image parts mixed within*, for use in stereoscopic viewing, (please see Figure 15C). The stereoscopic viewing is enabled by having a *micropolarizer* (49) having mixed regions of orthogonally polarization states (P1 and P2) that are aligned with the mixed left and right eye image display parts respectively such that the right eye and left eye image parts are coded with orthogonal polarization states (P1 and P2) respectively and then with the help of a spectacle (9) the left and right eye image display parts could be viewed by left and right eye respectively of an observer. Faris teaches that the *micropolarizer is manufactured* by *laminating* a *PVA film (51, Figure 12a) with a CAB film (52)* that together serve as the *laminated phase-difference film*, and disposing a *photoresist film* (53) at specific locations (please see Figure 12c). The combination is then

bleached in a hot humid atmosphere, which implicitly includes *hot water* and *drying* step afterwards, so that the areas that are not covered by the photoresist is exposed to loss the polarizability, (please see Figure 12h, column 11, lines 61-67). The micropolarizer (49) having alternative regions or patterned regions of polarization states is formed as shown in Figures 12g, 12k and 16a and 16b. The micropolarizer is then *superimposed* or *bonded* with the *spatially multiplexed image* (SMI) that could be provided by either a photographic plate or known display device, (please see column 7), which serves as the display member.

This reference has met all the limitations of the claims. Faris teaches that the micropolarizer and the SMI may be placed on a display medium (76), which may serve as the transparent member however it does not teach explicitly to include protective layer and adhesive layer. ***Okamoto*** in the same field of endeavor teaches a polarizer (18 in Figure 1) in a liquid crystal display device wherein the polarizer layer (19, Figure 3) interposed between a pair of TAC film (20 and 21) is adhered via an *adhesive layer* (24) to a *transparent glass substrate* (9). The polarizer is also protected by a *protective film* (23), (please see Figures 1 and 3). It would then have been obvious to one having ordinary skill in the art to have the micropolarizer (49) of Faris to be adhered to a glass substrate via an adhesive layer and to be covered with a protective layer for the benefit of easy adoption of the micropolarizer to the display device or display member for the stereoscopic viewing and for the benefit of protecting it from foreign dusts to enhance the viewing quality. With regard to claims 4 and 5, the protective film is inherently without birefringent property so that it does not interfere with the polarization property of the polarizer.

With regard to claims 3, 5 and 7 these references do not teach that the spaces between the photoresist members are filled with "appropriate members". However the specification fails to teach what is considered here as the "appropriate members" and fails to teach the criticality of having this arrangement would overcome any problems in the prior art such modification is considered to be an

obvious matter of design choice to one skilled in the art since such arrangement *does not* effect the function of the micropolarizer and the stereoscopic viewing.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending *Application No. 09/874,415*. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both recite a method for manufacturing a 3D image display body including the step of forming a laminated phase difference film by laminating a PAV film with a CAB or TAC film, the step of disposing resist members at specific locations, the step of providing protective film and the step of superposing it on a display member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent issued to Faris (PN. 5,264,964) teaches a multi-mode stereoscopic imaging system using a micropolarizer.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 703-305-6208. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1637. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Audrey Y. Chang
Primary Examiner
Art Unit 2872

A. Chang, Ph.D.
July 10, 2002